1926

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/119,427	07/20/1998	MARY ELLEN SIKSA	WH997-001	1077

7590 01/16/2004

ANNE VACHON DOUGHERTY
3173 CEDAR ROAD
YORKTOWN HEIGHTS, NY 10598

EXAMINER	
ANYA, CHARLES E	

ART UNIT	PAPER NUMBER
2126	12

DATE MAILED: 01/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

PRG

Office Action Summary	Application No.	Applicant(s)	
	09/119,427	SIKSA ET AL.	
	Examiner	Art Unit	
	Charles E Anya	2126	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3/ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on 10/29/03

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-28 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-28 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

13)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

a) ☐ The translation of the foreign language provisional application has been received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1 – 5,7,9,10,12,14,16 – 24 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pat. No. 5,754,173 to Hiura et al in view of U.S. Pat. No. 6,121,964 to Andrew.

3. As to claim 1, Hiura teaches a system for providing enhanced functionality for handling each event of at least one event received ("...GUI events..." Col. 5 Ln. 46 – 58, "...pressing a button..." Col. 6 Ln. 51 – 57), at the application display area of a window object having a plurality of window controls (Logic Object 102,104,108,107,112,113 Col. 4 Ln. 53 – 67) comprising: a plurality of control enhancer objects, each providing an interface to one specific window application control for the window object (L&F Agent 106,114,115 Col. 5 Ln. 1 – 46) and a list of the control enhancer objects for the window object (Widget 306 Col. 6 Ln. 1 – 10, "...list..." Col. 6 Ln. 57 – 67, Col. 7 Ln. 41 – 47), whereby the window object passes an event received at the application display area to all of the control enhancer objects on the list and wherein the control enhancer objects determine which of the plurality of control

enhancer objects should handle the received event (Step 406/410 Col. 64 – 67, Col. 7 Ln. 1 – 10).

Hiura is silent with reference to being customized with specific behaviors from a plurality of base classes and subclasses.

Andrew teaches being customized with specific behaviors from a plurality of base classes and subclasses (CpersistentControl Col. 7 Ln. 49 – 67). It would have been obvious to apply the teaching of Andrew to the system of Hiura. One would haven been motivated to make such a modification to provide a registry for storing property page values (Col. 7 Ln. 63 – 67).

4. As to claim 2, Andrew teaches each of the plurality of control enhancer objects is customized with at least one data storage handler (Registry 303 Col. 7 Ln. 61 – 67).

5. As to claim 3, Andrew teaches each of said plurality of control enhancer objects is customized with at least one data initializer ("...SetActive..." Col. 8 Ln. 24 – 54).

6. As to claim 4, Andrew teaches each of said plurality of control enhancer objects is customized with at least one data finalizer ("...SetActive..." Col. 8 Ln. 24 – 54).

7. As to claim 5. Hiura teaches a first one of the window controls is related to at least one second of said window controls, the control enhancer object for the first window control further comprising at least one pointer to the control enhancer object for

the second window control, means for communicating with the control enhancer object for the second window control (Line 302 Col. 5 Ln. 8 – 17) and at least one means for determining if an action at the control enhancer object for the first window control affects the control enhancer object for the second window control ("Managing multiple context of logic object" Col. 6 Ln. 33 – 34).

8. As to claim 7, Andrew teaches the control enhancer objects further comprises means; for validating data at the data finalizer ("...change...persistently stored..." Col. 8 Ln. 30 – 35).

9. As to claim 9, Hiura teaches a system for providing enhanced functionality for handling each event of at least one event received by a window object in an-application display area of the window ("...GUI events..." Col. 5 Ln. 46 – 58, "...pressing a button..." Col. 6 Ln. 51 – 57), the window object having a plurality of window controls comprising: a plurality of control enhancer objects, each providing an interface to a one specific window application control for the window object, and a list of said control enhancer objects for said window object, whereby said window object passes an event received at the application display area to the control enhancer objects on the list and wherein the control enhancer objects determine which of said Plurality of control enhancer objects should handle the received event (Step 406/410 Col. 64 – 67, Col. 7 Ln. 1 – 10).

Hiura is silent with reference to each of the control enhancer objects being customized with at least one of a plurality of specific behaviors using the plurality of base classes and subclasses comprising at least one data storage handler, at least one data initializer; and at least one data finalizer and a plurality of base classes and subclasses representing discrete behaviors.

Andrew teaches each of the control enhancer objects being customized with at least one of a plurality of specific behaviors using the plurality of base classes and subclasses comprising at least one data storage handler, at least one data initializer /and at least one data finalizer ("...SetActive..." Col. 8 Ln. 24 – 54) and plurality of base classes and subclasses representing discrete behaviors (CpersistentControl Col. 7 Ln. 49 – 67). It would have been obvious to apply the teaching of Andrew to the system of Hiura. One would haven been motivated to make such a modification to provide a registry for storing property page values (Col. 7 Ln. 63 – 67).

10. As to claim 10, Hiura teaches a first one of the window controls is related to at least one second of the window controls, the control enhancer object for the first window control further comprising at least one pointer to the control enhancer object for the second window control (Line 302 Col. 5 Ln. 8 – 17), at least one means for determining if an action at the control enhancer object for the first window control affects the control enhancer object for the second window control; and means for communicating with the control enhancer object for the second window control ("Managing multiple context of logic object" Col. 6 Ln. 33 – 34).

11. As to claim 12, Andrew teaches at least one of the control enhancer objects further comprises means for validating data at the data finalizer ("...change...persistently stored..." Col. 8 Ln. 30 – 35).

12. As to claim 14, Hiura teaches a method for providing enhanced functionality of window controls in response to at least one event received at the application display area of the window ("...GUI events..." Col. 5 Ln. 46 – 58, "...pressing a button..." Col. 6 Ln. 51 – 57), the window comprising a plurality of control enhancer objects each providing an interface to a one specific window application control for the window object (L&F Agent 106,114,115 Col. 5 Ln. 1 – 46), comprising the steps of: receiving an event at the application display area of the window, locating at least one interested control enhancer object for the event from said plurality of control enhancer objects, passing the event to the at least one interested control enhancer object; and handling the event at the at least one interested control enhancer object (Step 406/410 Col. 64 – 67, Col. 7 Ln. 1 – 10).

13. As to claim 16, Hiura teaches the control controls have relationships and wherein the received event is a display event further comprising the steps of: determining if the display event affects at least one of the relationships; evaluating whether at least one rule for the at least one relationship is true; and executing at least one action if the at least one rule is true ("...rule..." Col. 8 Ln. 39 – 49).

14. As to claim 17, Hiura teaches a method for rapid graphical user interface development for providing an enhanced control for event handling on a window ("...GUI events..." Col. 5 Ln. 46 – 58, "...pressing a button..." Col. 6 Ln. 51 – 57), comprising the steps of: creating at least one window application control for the window and instantiating a control enhancer object as an interface to the window for the control (L&F Agent 106,114,115 Col. 5 Ln. 1 – 46).

Hiura is silent with respect to creating a plurality of base classes and subclasses for discrete behaviors and customizing said control -enhancer object by associating selected behaviors to it using said plurality of classes and subclasses and passing a pointer for the control to said control enhancer (CpersistentControl Col. 7 Ln. 49 – 67).

Andrew teaches creating a plurality of base classes and subclasses for discrete behaviors and customizing said control -enhancer object by associating selected behaviors to it using said plurality of classes and subclasses and passing a pointer for the control to said control enhancer (CpersistentControl Col. 7 Ln. 49 – 67).

15. As to claim 18, Andrew teaches the associating as comprising the steps of: determining if special data handling is required ("...registry data...buddy control..."), and instantiating at least one data handier if special handling is required; and assigning said data handler to said control enhancer object ("...The CpropPagePersistent object..." Col. 7, Ln. 63 – 64).

16. As to claim 19, Andrew teaches the associating as comprising the steps of: determining if special initialization is required; instantiating at least one data initializer if special initialization is required; and assigning the at least one data initializer to the control enhancer object (Step 401 Col. 8, Ln. 25 –35).

17. As to claim 20, Andrew teaches the associating as comprising the steps of: determining if special initialization is required; instantiating at least one data initializer if special initialization is required; and assigning the at least one data initializer to the control enhancer object (Step 401 Col. 8 Ln. 25 – 35).

18. As to claim 21, Andrew teaches the associating as comprising the steps of: determining if special data finalization is required; instantiating at least one data finalizer if special finalization is required; and assigning the at least one data finalizer to the control enhancer object (Buddy Control Col. 5 Ln. 33 –51, Col. 8 Ln. 20 – 23).

19. As to claim 22, Andrew teaches the associating as comprising the steps of: determining if special data finalization is required; instantiating at least one data finalizer if special finalization is required; and assigning said at least one data finalizer to the control enhancer object (Buddy Control Col. 5 Ln. 33 –51, Col. 8 Ln. 20 – 23).

23. As to claim 23, Andrew teaches the associating as comprising the steps of: determining if special data finalization is required; instantiating at least one data finalizer

if special finalization is required and assigning said at least one data finalizer to said control enhancer object (Buddy Control Col. 5 Ln. 33 –51, Col. 8 Ln. 20 – 23).

20. As to claim 24, Andrew teaches the associating as comprising the steps of: determining if special data finalization- is required; instantiating at least one data finalizer if special finalization is required and assigning the at least one data finalizer to the control enhancer object (Buddy Control Col. 5 Ln. 33 –51, Col. 8 Ln. 20 – 23).

21. As to claim 28. Hiura teaches a system for rapid graphical user-interface development for providing enhanced control for event handling on a window comprising ("...GUI events..." Col. 5 Ln. 46 – 58, "...pressing a button..." Col. 6 Ln. 51 – 57), control enhancer creation means for instantiating a control enhancer object as an interface to the window for the a window application control (L&F Agent 106,114,115 Col. 5 Ln. 1 – 46).

Hiura is silent with reference to class means for creating a plurality of base classes and subclasses for discrete behaviors and control enhancer customizing means for customizing the control enhancer object by associating selected behaviors to it using the plurality of classes and subclasses.

Andrew teaches the class means for creating a plurality of base classes and subclasses for discrete behaviors and control enhancer customizing means for customizing the

control enhancer object by associating selected behaviors to it using said plurality of classes and subclasses (CpersistentControl Col. 7 Ln. 49 – 67).

22. Claims 6,8,11 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pat. No. 5,754,173 to Hiura et al in view of U.S. Pat. No. 6,121,964 to Andrew as applied to claim 1 above, and further in view of U.S. Pat. No. 5,651,108 to Cain et al.

23. As to claim 6, Hiura as modified by Andrew is silent with reference to at least one of the control enhancer objects further comprising means for determining limits to be placed on data related to the control enhancer object.
Cain teaches at least one of the control enhancer objects further comprising means for determining limits to be placed on data related to the control enhancer object (Col. 9, Ln. 43 – 56). It would have been obvious to apply the teaching of Cain to the system of Hiura as modified by Andrew. One would have been motivated to make such a modification to provide a specific appearance of data (Col. 9, Ln. 43 – 56).

24. As to claim 8, Hiura as modified by Andrew is silent with reference to at least one of the control enhancer objects further comprising means for identifying data related to the window control of the at least one control enhancer object.

Cain teaches at least one of the control enhancer objects further comprising means for identifying data related to the window control of the at least one control enhancer object ("...right mouse clicking..." Col. 11 Ln. 30 – 44).

25. As to claim 11, Cain teaches at least one of the control enhancer objects further comprising means for determining limits to be placed on data related to the control enhancer object (Col. 9, Ln. 43 – 56).

26. As to claim 13, Hiura as modified by Andrew is silent with reference to at least one of the control enhancer objects further comprising means for identifying data related to the window control of the at least one control enhancer object.
Cain teaches at least one of the control enhancer objects further comprising means for identifying data related to the window control of the at least one control enhancer object ("...right mouse clicking..." Col. 11 Ln. 30 – 44).

27. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pat. No. 5,754,173 to Hiura et al in view of U.S. Pat. No. 6,121,964 to Andrew as applied to claim 17 above, and further in view of U.S. Pat. No. 6,49,002 B1 to Christensen.

28. As to claim 15, Hiura teaches the window comprising a control enhancer object list of events affecting each of the listed control enhancer objects the wherein the

locating comprises: accessing the list of events ("...messages...list..." Col. 6 Ln. 22 – 24), and determining interested control enhancer objects based or the comparing (. Hiura is silent with reference to comparing the received event to the list of events. Christensen teaches comparing the received event to the list of events (Block 404/405 Col. 9 Ln. 49 – 56). It would have been obvious to apply the teaching of Christensen to the system of Hiura as modified by Andrew. One would have been motivated to make such a modification in order to update messages (Col. 9 Ln. 55 – 65).

29. Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pat. No. 5,754,173 to Hiura et al in view of U.S. Pat. No. 6,121,964 to Andrew as applied to claim 17 above, and further in view of U.S. Pat. No. 6,069,629 to Paterson et al.

30. As to claim 25. Andrew teaches instantiating the at least one relationship; assigning the at least one relationship to the control enhancer object; and passing a pointer to each of the at least one other control.

Hiura as modified by Andrew is silent with reference to the associating comprising the steps of: determining if the control has at least one relationship with at least one other control on the window.

Paterson teaches instantiating the associating comprising the steps of: determining if the control has at least one relationship with at least one other control on the window (box 202 Col. 10 Ln. 24 – 45). It would have been obvious to apply the teaching of

Paterson to the system of Hiura as modified by Andrew. One would have been motivated to make such a modification in order to ascertain window object relationships (Col. 10 Ln. 24 – 27).

31. Claims 26 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pat. No. 5,754,173 to Hiura et al in view of U.S. Pat. No. 6,121,964 to Andrew as applied to claim 25 above, and in view of U.S. Pat. No. 6,069,629 to Paterson et al. and further in view of U.S. Pat. No. 5,555,365 to Selby et al.

32. As to claim 26, Hiura as modified by Andrew and Paterson is silent with reference to instantiating at least one rule for the at least one relationship; and assigning the at least one rule to the at least one relationship.
Selby teaches at least one rule for the at least one relationship; and assigning the at least one rule to the at least one relationship ("...not equal...", Col. 6, Ln. 15 – 17) and assigned the at least one rule to the at least one relationship (If dependency is not equal..." Col. 6, Ln. 15 – 17). It would have been obvious to apply the teaching of Selby to the system of Hiura as modified Andrew and Paterson. One would have been motivated to make such a modification in order to determine the type of relationship between window controls.

The Examiner is aware that instantiating at least one rule for said at least one relationship is not explicitly disclosed. However, it is inherent that instantiating at least one rule for the at least one relationship has to be performed in the process of determining the type of relationship between window controls.

As to claim 27, Hiura as modified by Andrew and Paterson is silent with reference to instantiating at least one action for the at least one rule and assigning the at least one action to the at least one rule.

Selby teaches at least one action for the at least one rule and assigning the at least one action to the at least one rule ("...enables or disable...", Col. 6 Lon. 15 – 20) and assigned the at least one action to the at least one rule (If dependency is not equal..." Col. 6 Ln. 15 – 20).

The Examiner is aware that instantiating at least one action for said at least one rule is not explicitly disclosed. However, it is inherent that instantiating at least one action for the at least one rule has to be performed in the process of determining the type of relationship between window controls.

Response to Arguments

33. Applicant's arguments with respect to claims 1- 28 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles E Anya whose telephone number is (703) 305-3411. The examiner can normally be reached on M-F (8:30-6:00) First Friday off.

The fax phone number for the organization where this application or proceeding is assigned is (703) 746-7239.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Charles E Anya
Examiner
Art Unit 2126

cea

MENG-AL T. AN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100